

REMARKS

This is in response to the Official Action of May 9, 2005. It is respectfully believed that the claims are being amended in a manner that will clearly differentiate over the prior art.

Claims 1, 2, and 4-13 were rejected as being unpatentable over the Evans patent in view of Isbell. The Evans patent No. 563,463 shows fixed sickle guards that do have curved edges, but they are not sections that are on a reciprocating knife. In fact, the reciprocating knife is indicated at 22 in Fig. 1 of Evans, and it has straight side sections from the tip to the base. The Isbell patent shows a conventional cutter bar, that does have sickle sections, but these again are straight-edged sections. It is respectfully believed that there is no suggestion that configurations of the sides of a sickle guard, that is a stationary item could be used to any advantage in the reciprocating sickle sections.

It is thus respectfully submitted that there is no suggestion that would render the claimed arrangement obvious.

It is further respectfully pointed out that the Evans patent has been around since July 7, 1896 when it was published, along with reciprocating sickle sections that have straight edges as disclosed in Evans. There has been no teaching to provide curved edges shown in the stationary sickle guards in the Evans patent onto or into the edges of a reciprocating sickle section. This length of time that the two means for making the combination alleged to be obvious have existed (over 100 years) militates against a sustainable obviousness based on a combination of the teachings.

Evans provides an indication that the "box" thinking for sickle bars has been to use straight edge reciprocating sickle sections as the answer to cutting crop material. The present inventor, however, came up with the concept of utilizing

recesses that were large enough to increase the ability of the sickle to cut material with each stroke by providing the substantial recesses into the side edges of the sickle knife so as the knife moves across edges of the sickle guards the material cut is increased over a straight edge.

Claims 1, 6 and 9 have been amended to more particularly define the curvature of these cutting edges in relation to a central plane that bisects the sickle sections.

In claim 1, the knife section has been specifically identified as being for mounting on a reciprocating sickle bar for a harvester, and reciprocating relative to a sickle guard, as show herein, during use. Further, the concave line is defined at the last portion of the claim as being sufficiently to increase material cut with each reciprocation of the cutting knife when installed on a harvester sickle bar.

The reciprocating knife environment is specifically claimed, therefore, and is not the sickle guard as in the Evans patent. The sickle knife has the concave edges.

Claim 4 has been amended to more particularly define the line for cutting, that is the cutting line, wherein the line moves away from the central plane a substantially greater rate for each increment of distance along the cutting edge in direction toward and adjacent the base than at the leading end. Looking at the present drawings, it can be seen that the lateral extension of the cutting edge moves out at a greater rate as the position of the cutting line along the central plane moves toward the base.

Claim 6 includes the cutting line being positioned in substantially a same manner as claim 4 but worded so that it will curve laterally of the central plane a substantially less incremental distance for each increment of distance along the center plane adjacent the leading end than adjacent the base. This again gives the unique configuration that increases the

cutting ability of the sickle knife line as it reciprocates during its working strokes over a straight edge of a knife section. Thus, claim 6 is believed allowable with claims 1 and 4.

Claim 9 likewise includes the cutting line moving out at a greater rate at points on the cutting line spaced farther from the leading end. In other words, the rate of lateral movement is greater for the cutting line as it approaches the base of the sickle section.

It is respectfully believed that claim 3 is allowable with claim 1, and that all the claims are clearly allowable of the references cited.

The applicant is including an Information Disclosure Statement showing references uncovered in our European Search for a corresponding case. The French patent, for which an abstract translation is enclosed, illustrates a very slight concave cutting edge, but with the amendments to the claims, this has been differentiated clearly and the claims are allowable.

Favorable action is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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